IN THE OFFICE OF THE STATE ENGINEER OF THE STATE OF NEVADA

ORDER

#1264

DESIGNATING THE DIAMOND VALLEY HYDROGRAPHIC BASIN (153) A CRITICAL MANAGEMENT AREA

WHEREAS, the State Engineer designated the Diamond Valley Hydrographic Basin, located within Eureka County, Nevada, as provided under the provisions of Nevada Revised Statute (NRS) § 534.030, by the following Orders:

- 1. Order No. 277, dated March 11, 1941, designating a portion of the basin.
- 2. Order No. 280, dated August 28, 1964, amending the designated area described in Order No. 277.
- 3. Order No. 815, dated April 4, 1983, amending the description of the designated area.

WHEREAS, pursuant to NRS § 534.120, the State Engineer determined the groundwater of the Diamond Valley Hydrographic Basin was being depleted and the following orders were entered, deemed essential for the welfare of the area involved:

- 1. Order No. 541, dated December 22, 1975, curtailed new appropriations in location-specific areas subject to limited exceptions.
- 2. Order No. 717, dated July 10, 1978, curtailed new appropriations for irrigation with limited exceptions.
- 3. Order No. 809, dated December 1, 1982, ordering the installation of totalizing meters on all permitted and certificated wells. The Order was suspended for one-year by Order 813, dated February 7, 1983, but was never reinstated.

Order No. 1226, dated March 26, 2013 curtailed all new appropriations with limited exceptions.

WHEREAS, the United States Geological Survey estimates that 30,000 acre-feet of water annually are available as the perennial yield from the Diamond Valley Hydrographic Basin.¹

WHEREAS, NRS § 534.110(7)(a) states the State Engineer "[m]ay designate as a critical management area any basin in which withdrawals of groundwater consistently exceed the perennial yield of the basin."

WHEREAS, the State Engineer finds that annual crop inventories conducted by the Division of Water Resources indicate that estimated groundwater pumping for irrigation purposes totaled the following:²

		Estimated Acre-feet
Year	Acres Irrigated	Pumped
1975	17,796	53,388 ³
1976	18,717	56,151 ⁴
1977	19,988	52,956 ⁵
1978	21,855	59,760 ⁶
1979	22,583	61,839 ⁷
1980	23,055	64,035 ⁸

¹ J.R. Harrill, *Hydrologic Response to Irrigation Pumping in Diamond Valley, Eureka and Elko Counties, Nevada, 1950-65,* Water Resources Bulletin No. 35, (Department of Conservation and Natural Resources, Division of Water Resources and U.S. Department of Interior, Geological Survey), 1968.

² The State Engineer's method for estimating pumpage has changed over the years. In 1975 and 1976, pumpage was estimated at 3 acre-feet per acre irrigated. From 1977 to 2005, pumpage was estimated at 3 acre-feet per acre for alfalfa, and 2 acre-feet per acre for grain, pasture and grass hay. From 2006 to 2013, pumpage was estimated to equal the water right for the acreage irrigated, usually 4 acre-feet per acre. In 2014, a method that considers crop type and irrigation method was used to estimate pumpage. See generally, inventories cited infra.

³ Diamond Valley Crop and Water Survey (November 3-7, 1975), official records in the Office of the State Engineer.

⁴ Diamond Valley Crop and Water Survey (November 8-11, 1976), official records in the Office of the State Engineer.

⁵ Diamond Valley Crop and Water Survey (November 14-17, 1977), official records in the Office of the State Engineer.

⁶ Diamond Valley Crop and Water Survey (November 8-15, 1978), official records in the Office of the State Engineer.

⁷ Diamond Valley Crop and Water Survey (November, 1979), official records in the Office of the State Engineer.

⁸ Diamond Valley Crop and Water Survey (November, 1980), official records in the Office of the State Engineer.

1981	25,279	71,7459
1982	25,305	73,336 ¹⁰
1983	24,812	71,857 ¹¹
1984	26,844	78,730 ¹²
1985	26,844	78,730 ¹³
1986	20,656	58,883 ¹⁴
1987	22,966	66,028 ¹⁵
1988	21,569	63,356 ¹⁶
1989	23,485	66,734 ¹⁷
1990	22,235	64,210 ¹⁸
1991		No report for 1991
1992	20,640	58,585 ¹⁹
1993	21,421	60,478 ²⁰
1994	21,556	60,883 ²¹
1995	19,750	55,140 ²²

⁹ Diamond Valley Crop and Water Survey (November, 1981), official records in the Office of the State Engineer.

¹⁰ Diamond Valley Crop and Water Survey (November 9-10, 12, 16, 1982), official records in the Office of the State Engineer.

¹¹ Diamond Valley Crop and Water Survey (November 7-10, 1983), official records in the Office of the State Engineer.

¹² Diamond Valley Crop and Water Survey (November 1, 7-9, 14, 1984), official records in the Office of the State Engineer.

¹³ Diamond Valley Crop and Water Survey (December 3-4, 1985), official records in the Office of the State Engineer.

¹⁴ Diamond Valley Crop and Water Survey (November 4-5, 12-13, 1986), official records in the Office of the State Engineer.

¹⁵ Diamond Valley Crop and Water Survey (November 12, 17-19, 1987), official records in the Office of the State Engineer.

¹⁶ Diamond Valley Crop and Water Survey (October 17-21, 1988), official records in the Office of the State Engineer.

¹⁷ Diamond Valley Crop and Water Survey (November 2-3, 1989), official records in the Office of the State Engineer.

¹⁸ Diamond Valley Crop and Water Survey (November 28, 1990), official records in the Office of the State Engineer.

¹⁹ Diamond Valley Crop Inventory (August, 1992), official records in the Office of the State Engineer.

Diamond Valley Crop Inventory (June, 1993), official records in the Office of the State Engineer.

²¹ Diamond Valley Crop Inventory (June, 1994), official records in the Office of the State Engineer.

²² Diamond Valley Crop Inventory (August, 1995), official records in the Office of the State Engineer.

1996	20,413	57,779 ²³
1997	19,750	55,140 ²⁴
1998	18,916	60,985 ²⁵
1999	23,588	68,883 ²⁶
2000	22,525	70,601 ²⁷
2001		No report for 2001 ²⁸
2002	21,850	$60,900^{29}$
2003	21,850	$60,900^{30}$
2004	23,126	65,687 ³¹
2005	23,126	65,687 ³²
2006	24,152	70,000 ³³
2007	24,011	69,600 ³³
2008	24,220	70,200 ³³
2009	24,435	70,900 ³³
2010	24,608	71,400 ³³
2011	24,357	70,600 ³³
2012	25,234	73,200 ³³
2013	25,323	73,400 ³³
2014	25,181	72,236 ³⁴

²³ Diamond Valley Crop Inventory (August, 1996), official records in the Office of the State Engineer.

²⁴ Diamond Valley Crop Inventory (August, 1997), official records in the Office of the State Engineer.

²⁵ Diamond Valley Crop Inventory (September, 1998), official records in the Office of the State

²⁶ Diamond Valley Crop Inventory (November, 1999), official records in the Office of the State Engineer.

²⁷ Diamond Valley Crop Inventory (November, 2000), official records in the Office of the State Engineer.

No inventory was conducted in 2001 due to lack of funding.

²⁹ Diamond Valley Crop Inventory (October, 2002), official records in the Office of the State Engineer.

³⁰ Diamond Valley Crop Inventory (December 9, 2003), official records in the Office of the State Engineer.

31 Diamond Valley Crop Inventory (October 6, 2004), official records in the Office of the State Engineer.

32 Diamond Valley Crop Inventory (September 15, 2005), official records in the Office of the

State Engineer.

33 The State Engineer re-estimated the pumpage for the years 2006-2013 using 2.9 acre-feet per acre, rather than the water right duties as reported in the crop inventories, as it more accurately reflects actual pumpage amounts.

³⁴ Preliminary data.

WHEREAS, the State Engineer finds that the withdrawals of groundwater have exceeded the perennial yield of the basin at least since 1975, and therefore, the State Engineer finds that groundwater withdrawals have consistently exceeded the perennial yield.

WHEREAS, the State Engineer finds that the groundwater levels in the area of the farms has locally declined over one-hundred feet since 1960, and that the water level continues to decline at the rate of two feet per year or more.³⁵

NOW THEREFORE, it is ordered that the Diamond Valley Hydrographic Basin is hereby designated a critical management area pursuant to NRS § 534.110(7)(a).

JASON LING, P.E.

Dated at Carson City, Nevada this

³⁵ Water level data for Basin 153, official record in the Office of the State Engineer, available at http://water.nv.gov/data/waterlevel/ (last accessed June 26, 2015).